

NGHIÊN CỨU YẾU TỐ ẢNH HƯỞNG TỚI Ý ĐỊNH MUA HÀNG TRỰC TUYẾN CỦA NGƯỜI VIỆT NAM: MỞ RỘNG LÍ THUYẾT MÔ HÌNH CHẤP NHẬN CÔNG NGHỆ (TAM)

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TÓM TẮT

Nghiên cứu khảo sát các yếu tố khác nhau ảnh hưởng đến ý định mua sắm trực tuyến của người tiêu dùng Việt Nam. Mô hình chấp nhận công nghệ (TAM) được sử dụng làm lý thuyết nền tảng để phát triển khung khái niệm nhằm kiểm tra ảnh hưởng của các yếu tố đến ý định của người tiêu dùng đối với mua sắm trực tuyến. Nghiên cứu sử dụng bảng câu hỏi có cấu trúc để thăm dò ý kiến của 468 người tiêu dùng về các yếu tố ảnh hưởng đến hành vi mua sắm trực tuyến và dữ liệu thu được phân tích bằng phần mềm SPSS 20.0. Kết quả nghiên cứu cho thấy ảnh hưởng xã hội có tác động mạnh nhất đến ý định mua hàng trực tuyến, tiếp theo là trải nghiệm và cảm nhận tính hữu ích, niềm tin cảm nhận có tác động không đáng kể đến ý định mua hàng trực tuyến, trong khi rủi ro cảm nhận có tác động tiêu cực đến ý định mua hàng trực tuyến. Kết quả nghiên cứu là tài liệu quý giá để các doanh nghiệp trực tuyến xây dựng chiến lược kinh doanh phù hợp nhằm thu hút nhiều khách hàng hơn.

Từ khóa: kinh doanh trực tuyến, mô hình chấp nhận công nghệ (TAM), ý định mua hàng trực tuyến.

FACTORS INFLUENCING ONLINE PURCHASE INTENTION AMONG VIETNAMESE: EXPANSION OF TECHNOLOGY ACCEPTANCE MODEL (TAM) THEORY

ABSTRACT

The study investigated various factors influencing Vietnamese consumers' intentions towards online shopping. The Technology Acceptance Model (TAM) was used as a foundational theory to develop a conceptual framework to examine the influence of diverse factors on consumer intentions toward online shopping. The study used a structured questionnaire to poll the opinions of 468 consumers on factors affecting online shopping behavior, and the data obtained was analyzed using SPSS 20.0 software. Research results show that social influence has the most potent effect on online purchase intention, followed by experience and perceived usefulness; perceived trust has an insignificant impact on online purchase intention, while perceived risk has a negative impact on online purchase intention. The research results are valuable literature for online businesses to develop appropriate business strategies to attract more customers.

Keywords: online business, online purchase intention, Technology Acceptance Model (TAM).

1. INTRODUCTION

The emergence of smartphones, mobile communication devices, and other wireless transmission technologies has made it possible for consumers to make purchases anytime, anywhere, and in various methods. Online shopping has become a trend in recent years due to the development of technology and the superior values that online shopping brings compared to traditional shopping (Yoke Cheng et al., 2022). The benefits of online shopping include saving time and effort by diversifying choices so customers can easily make the most optimal shopping decisions in terms of quality and price, payment and delivery methods, and after-sales service. However, online shopping also has limitations, such as consumers quickly losing balance in shopping, sometimes buying according to preferences and habits but not having real needs, leading to waste. In addition, shopping in a virtual environment also concerns customers about quality and delivery methods, which directly affects online shopping intention (Aziz & Wahid, 2018). Although the trend of online shopping is increasing, there are still many customers who need clarification and support to buy online due to a lack of trust. Therefore, research on online purchasing behavior in today's time is vital. Many researchers have also delved into the factors that promote consumers' online purchasing behavior. Specifically, Yoke Cheng et al. (2022), Hatamifar et al. (2021), and Binh et al. (2022) examined the increase in consumer intentions toward online shopping. They emphasized that there are many factors affecting consumers' online purchasing behavior in different contexts and environments. Specifically, the study of Yoke Cheng et al. (2022) showed that perceived trust has a significant influence, while perceived ease of use and perceived risk have an insignificant influence on people's online purchase intention. Shekhar & Jaidev (2020) found that trust in social commerce has been identified as a mediator

in the relationship between social commerce constructs, perceived ease of use, perceived usefulness, and intention to purchase.

In recent years, the technology acceptance model (TAM) has been used by many researchers to understand consumer shopping behavior. TAM is a theory that explains the factors influencing awareness and intention to use technology. It is a model that predicts customer attitudes and loyalty toward the benefits and uses of information (Davis, 1989). The current study examines the relationship between factors in the TAM theoretical model and consumers' online shopping behavior. However, it adds several other factors, such as perceived trust, risk, experience, and social influence. There have been many studies applying the TAM theoretical model to evaluate factors affecting consumers' online purchasing behavior (Heijden et al., 2003; Hatamifar et al., 2021; Gunawan et al., 2023). However, research is limited to the theoretically proposed group of factors, including perceived usefulness and ease of use. It has been proven that there are many other factors related to technology that have a significant impact on online purchasing behavior; therefore, expanding the TAM theoretical model in researching people's online purchasing behavior is needed. The results of the current research will be the foundation for helping administrators in Vietnam's e-commerce sector come up with appropriate strategies to promote consumers' online purchasing behavior.

2. METHODOLOGY

To evaluate the influence of factors on the online purchase intention of Vietnamese people, six main factors are considered: Perceived usefulness, perceived ease of use, perceived risk, perceived trust, experience, and social influence. The questionnaire was sent directly and via email to consumers in Vietnam in the period from March to May 2023. 500 samples of questionnaires were sent, and 468 valid questionnaires were collected for analysis. Random sampling is used to select respondents. Data were collected using a 5-point Likert scale ranging from strongly dissatisfied to strongly satisfied.

Table 1. Variables of the study

Factors	Variables	Sources
Perceived usefulness	Buying online saves time	Hatamifar et al. (2021), Binh et al. (2022), Yoke Cheng et al. (2022)
	Buying online helps save on travel costs.	
	Customers have many choices when shopping online.	
	There are many attractive promotions only available for online purchases.	
Perceived ease of use	Using a smartphone to shop online requires little effort.	Hatamifar et al. (2021), Binh et al. (2022), Yoke Cheng et al. (2022)
	Online shopping applications are straightforward to use.	
	Online shopping applications are easy to understand and straightforward.	
	The steps to order online are very simple.	
Perceived risk	Buying online can put product quality at risk.	Yoke Cheng et al. (2022).
	Buying online can put personal information at risk.	
	Buying online can be financially risky.	
	Buying online may run the risk of delivery problems.	
Perceived trust	Online shopping through mobile apps is reliable in Vietnam.	Hatamifar et al. (2021), Binh et al. (2022), Yoke Cheng et al. (2022)
	Online shopping through mobile apps is trustworthy in Vietnam.	
	Online retailers provide reliable information and always keep their promises.	
	In my future shopping, I will use mobile apps and trust them.	
Experience	I bought products frequently through mobile apps.	Hatamifar et al. (2021)
	Mobile apps offer more than traditional shopping methods; hence, I get more experiences and fun.	
	I am knowledgeable about using mobile apps before I purchase anything.	
	Experience is an essential factor that helps me make an online purchasing decision.	
Social influence	Family, friends, and acquaintances introduced and encouraged me to shop online.	Gunawan et al. (2023)
	Before participating in online shopping, I read a lot of information and reviews on e-commerce sites, forums, and social networks.	
	Information in the mass media influences my online shopping intention.	
	Sellers' feedback and other customers' comments on e-commerce sites influence my online shopping decision.	
Online purchase intention	I intend to engage in online shopping soon.	Hatamifar et al. (2021), Binh et al. (2022)
	I will introduce family and friends and post information about participating in online shopping on my social media accounts.	
	I will use online shopping instead of traditional shopping.	

The questionnaire is divided into two main parts. The first part includes respondents' information, and the second part looks at the critical variables of this study such as perceived perceptions, perceived ease of use, perceived risk, perceived trust, experience, social influence, and online purchase intention. The questionnaire is adapted from previous studies combined with interviews and in-depth consultation with some experts in online shopping in Vietnam. This study applies multiple regression methods through SPSS to analyze data (Table 1).

3. RESEARCH CONTENT

3.1. Literature review and hypotheses development

3.1.1. The theory of Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is a theoretical model of technology usage behavior introduced by Davis (1989). This model explains how users evaluate and use new technology. According to TAM, users' technology usage behavior depends on two main factors: Perceived usefulness and Perceived ease of use. Perceived usefulness is the degree to which users believe the technology will benefit their work or needs. Perceived ease of use is the degree to which the user believes using the technology will be easy and uncomplicated. According to TAM, if users believe that technology will bring value to their work or needs and that using it is easy, they will use it (Hatamifar et al., 2021).

Due to appreciating the TAM model as a solid theoretical foundation for evaluating technology use behavior, many scholars have used TAM to analyze technology application behavior in many different cases (Hubert et al., 2017). However, TAM is often a technology-based model whose underlying structures do not comprehensively promote diversity in users' task environments; therefore, it needs to be expanded to explain better innovative technology adoption behavior (Schepers & Wetzels, 2007). This study enhances the TAM model by adding four additional constructs:

perceived trust, perceived risk, experience, and social influence.

3.1.2. Online Purchase Intention

According to Lodesso et al. (2019), intention is a factor that represents an individual's ability to perform future behavior. Behavioral intention precedes actual behavior and is also a factor in predicting whether the behavior will be performed (Ajzen & Fishbein, 1980). In other words, user behavior is influenced by behavioral intentions (Davis, 1989). According to Ajzen (1991), intention is assumed to include motivational factors that influence behavior, which are signs showing willingness and effort to perform the behavior. According to the theory of planned behavior (TPB), the intention to perform a behavior is influenced by attitudes toward the behavior, subjective norms, and perceived behavioral control (Ajzen, 1991). The stronger the intention for a behavior, the higher the likelihood that the behavior will be performed (Ajzen, 1991). Online purchase intention is a customer's intention to use online channels such as websites and social networks to purchase goods and services. In e-commerce, online purchase intention is when a customer wants to make a transaction through a website to own goods and services to satisfy their needs. According to Zhang et al. (2020), online shopping intention is consumers' willingness to purchase products and services after they review related online comments. Shi Wen et al. (2020) affirmed that online shopping intention is inevitable when consumers know the role of online shopping. After the Covid-19 pandemic, consumer awareness of online shopping behavior has increased quickly. They shop online not only for convenience and cost savings but also because of safety concerns.

3.1.3. Proposed research model

According to Ajzen (1991), intention is directly influenced by attitudes, subjective norms, and perceived behavioral control. Factors that motivate consumers to participate in online shopping come from

convenience, variety of products and services, rich information, easy access, and ease of shopping. According to Davis (1989), online shopping intention is influenced by perceived usefulness and ease of use. Al Hamli & Sobaih (2023) show that product variety, payment methods, and psychological factors are three critical factors affecting online shopping behavior, while convenience and trust factors do not have a significant impact on consumers' online shopping decisions in the context of COVID-19. In online shopping, consumers often face risks such as financial risks, information security risks, product risks, risks of not receiving goods, and return policy risks (Tham, et al. 2019). Ventre & Kolbe (2020) found that perceived usefulness influences trust and online purchase intention, trust has an inverse relationship with perceived risk and influences positively in online purchase intention, while perceived risk has no relationship with online purchase intention.

In a specific context, depending on consumers' awareness and perception of online

shopping and different research purposes, factors affecting consumers' online shopping intentions will be identified and selected. Therefore, the determination of factors is quite flexible, depending on the unique advantages of each different market segment.

Based on the above theory, along with related research works, this study examines customers' online purchasing intentions based on the TAM framework. However, according to (Al-Hattami et al., 2023), the original TAM constructs may need to appropriately capture the essential beliefs influencing consumers' online purchasing behavior. Therefore, in the context of this study, other essential factors need to be considered to understand consumers' engagement intentions better when making online purchases. The current study extends TAM by incorporating external factors such as perceived trust, perceived risk, experience, and social influence to evaluate Vietnamese people's online shopping intentions. The proposed research model is as follows (Figure 1).

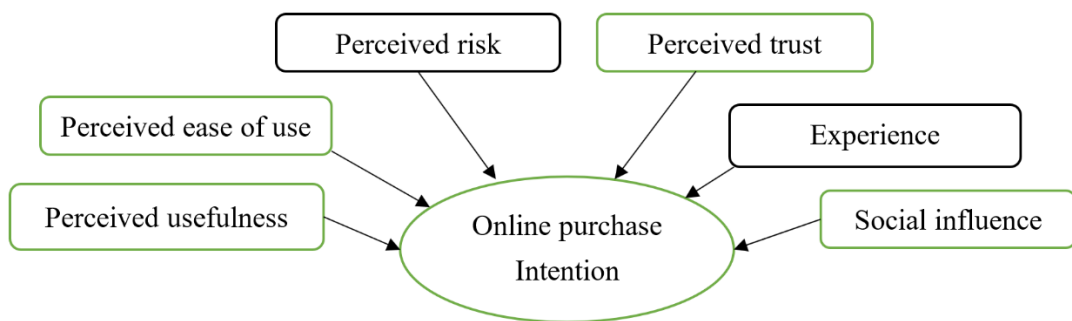


Figure 1. Conceptual framework

3.1.4. Hypotheses development

This study examines customers' intention to purchase online based on the TAM framework. Perceived benefits are one of the key drivers of technology adoption on the platform. Convenience is an advantage of new technology that makes it easier for customers to purchase through applications (Davis, 1989). Although it is commonly believed that ease of use is not as important as perceived benefits, it has been consistently

shown that the experience of convenience when using technology has a direct impact on post-purchase behavior customers and purchase intention through future technology applications.

Although research on TAM provides insights into technology use, it focuses on perceived ease of use and perceived usefulness as determinants of use or intention to use. It ignores other external factors that may act as determinants of (Igbaria & Iivari,

1995). Perceived ease of use and perceived usefulness are relevant factors determining technology acceptance, TAM must be expanded by involving other factors (Xu et al., 2021). Initial TAM constructs may not appropriately capture essential beliefs influencing consumers' online purchasing behavior (Al-Hattami et al., 2023).

Therefore, in the context of this study, other essential factors need to be considered to understand consumers' engagement intentions better when making online purchases. The current study extends TAM by incorporating external factors such as perceived trust, perceived risk, experience, and social influence to evaluate Vietnamese people's online purchase intentions.

Perceived usefulness (PU)

According to Davis (1989), perceived usefulness is the degree to which an individual believes using a particular system will increase job performance. Perceived usefulness, including convenience, financial, time, and energy savings, are reasons that promote online shopping intention. The perceived usefulness of a website often depends on the effectiveness of technological features such as advanced search engines and personalized services that a business provides to consumers. Many studies have shown a positive correlation between usefulness and consumer behavior (Juyal, 2018; Xu et al., 2020; Ha et al. 2021); suppose consumers realize that buying online requires little effort. In that case, impulse purchases are more likely because it is known that purchases involve investments of time, money, and mobility (Al-Hattami et al., 2023). Most studies have shown convenience and time savings as the main reasons consumers shop online. Research has shown that searching for products and services via the Internet, particularly e-commerce sites, will be quick and convenient and reduce effort and costs. Hernández et al. (2011) revealed that perceived usefulness has a significant influence on online shopping behavior in Spain. However, Aghdaie et al.

(2011) suggested that perceived usefulness does not have a significant influence on Internet purchasing behavior in Iran. It may be due to the different views of respondents from developed and developing countries regarding the perceived beneficial influence on their internet shopping behavior. Concerns about price, quality, durability, and other product-related aspects are critical drivers of purchasing decisions in developed countries, but considerations may be different in developing countries.

Therefore, the study proposes the following hypothesis:

H1: Perceived usefulness has a positive influence on online purchase intention.

Perceives ease of use (PEOU)

Perceived Ease of Use is the level at which a person believes using a particular system will be effortless (Davis, 1989). In online shopping, PEOU can be defined as the degree to which consumers believe that they do not need to make an effort when shopping online (Shekhar & Jaidev, 2020). Similar to PU, the role of PEOU has been shown to have a significant influence on online shopping intention through attitude. According to Yoke Cheng et al. (2022), perceived ease of use is the belief that consumers have that using technology to make online purchases is easy, less time-consuming, and makes an effort to learn how to use it. Therefore, perceived ease of use dramatically affects consumers' intention to use new technological services when a phone or computer user believes in the ability to perform a task (purchase) on their phone or computer quickly, depending on the many interface designs of these electronic devices. Research has shown that ease of use is strongly correlated with the ease of participation in online shopping systems (i.e., websites, stores, apps) (Binh et al., 2022). Perceived ease of use motivates customers in online shopping. In the Vietnamese market, Thang & Lien (2017) and Binh et al. (2022) confirm that perceived ease of use has a

positive impact on online shopping intention. On that basis, the study proposes the following hypothesis:

H2: Perceived ease of use positively impacts online purchase intention.

Perceived Risk (PR)

Perceived risk is a customer's perception of the possibility of gain and loss in online transaction outcomes (Tham, et al. 2019). Perceived risk refers to a consumer's perception of uncertainty and adverse consequences when participating in a particular activity. Risks when buying online can include Product risks, financial risks, and information security risks (Yoke Cheng et al., 2022). These risks occur mainly because the buyer does not see the actual image of the product and does not come into direct contact with the salesperson, which causes uncertainty in the consumer's mind about the expected performance of the product. Furthermore, all transactions are done through the website, not directly as in traditional transactions. In traditional commerce, customers can go directly to the store, touch, feel, or even try the product before purchasing, while online consumers cannot have such conditions.

Ventre & Kolbe (2020) argues that perceived risk is a decisive factor in explaining consumer buying behavior because consumers are more concerned with avoiding loss or damage to themselves than trying to achieve successful transactions. Consumers' perceived risk has been shown to influence their online decisions (Simon Kofi Dogbe et al., 2019). Most empirical studies show that the perceived risk has a negative impact on online purchase intention (Tham, et al. 2019). When consumers accept risks because they trust a sales website, they are likelier to lose trust when encountering problems. On that basis, the study proposes the following hypothesis:

H3: Perceived risk has a negative impact on online purchase intention.

Perceived Trust (PT)

Trust is the expectation that individuals or companies, through interactions, will behave ethically, reliably, and by social norms. Perceived trust refers to an assumption about current human behavior in society. Puspitarini et al. (2021) added that perceived trust is an established psychological state that indicates a consumer's willingness or acceptance of vulnerability to positive expectations that individuals will behave in a certain way. Trust creates a positive image in customers' minds about a product/service and companies doing business in e-commerce. Trust is a factor that significantly influences consumers' intentions and behavior in both online and traditional shopping. When customers put trust in their online shopping activities, they evaluate that activity well, meaning they have a positive attitude and vice versa. According to Puspitarini et al. (2021), customers often rely on their trust in a product or service to make purchasing decisions. Sallam (2016) affirms that trust is the most critical long-term barrier to retaining a customer and making them repurchase a product or use a service again. In addition, trust can also lead to consumers' willingness to engage in positive behaviors.

In a virtual world entirely of ambiguity, online shopping is always ambiguous, and there is always uncertainty due to consumers' inability to physically evaluate products before purchasing. Therefore, consumers tend to trust information sources on websites. However, inconsistent information has made consumers hesitant to shop online (Rita et al., 2019). Trust influences consumers' online shopping intention toward a retailer's web source (Yoke Cheng et al., 2022). Therefore, the study proposes the following hypothesis:

H4: Perceived trust has a positive impact on online purchase intention.

Experience (EP)

Previous online purchase experience can be understood as a consumer's intention to repurchase a product or service on an online

platform influenced by a history of previous Internet purchasing behavior (Monsuwe' et al., 2004). Weisberg et al. (2011) found that purchase experiences are essential for predicting customers' future purchase intentions, and online experiences are also closely related to the benefits of online shopping and consumers' perceived risk factors. Previous studies show that a successful online shopping experience through an app improves repurchase intention (Maruping et al., 2016). Research also shows that people who have had negative experiences when shopping online are not motivated to shop online again, at least for a specific period (Stouthuysen et al., 2018; Juyal, 2018). Previous online shopping experiences can help customers minimize risks. There are more risks when customers buy products on social networks than on a standard e-commerce website. Therefore, the confidence and skills online shoppers gain from their online shopping experience can help buyers overcome risks and build trust. Previous experience will strengthen the customer's trust and confidence in that online shopping platform, especially when the retailer's website meets customer expectations and satisfaction (Pappas et al., 2012).

Therefore, the study proposes the following hypothesis:

H5: Experience has a positive impact on online purchase intention.

Social influence (SI)

Social influence is a decisive factor in behavioral intention, such as subjective norm according to TRA theory (Ajzen, 1991) or TAM (Davis, 1989). In online shopping, social influence is even more critical due to the cultural and specific characteristics. Social influence refers to the impact of social factors (usually surrounding people, concepts, and ethics) on the behavior of an individual or organization. Studies show that social influence has a significant impact on consumer behavior because no one in this world can live a life without ever being

influenced by others (Mei & Boon Aun, 2019). A person's online purchasing beliefs and behavior can be influenced by word-of-mouth information from relatives, friends, or even information spread on social networking sites from strangers (Brusch & Rappel, 2020). Many of an individual's decisions about whether or not to use an online shopping service are greatly influenced by the beliefs, attitudes, behaviors, or opinions of others regarding the use, purchase, and delivery of electronic applications. Sometimes, a person's decision to buy online or not is just because other people do the same, or a close group's perception of online shopping behavior (positive or negative) also affects an individual's online purchasing decision. The opinions of close people (such as family, friends and colleagues, celebrities...) can directly or indirectly influence consumers' trust in online vendors. Dewi et al. (2020) and Gunawan et al. (2023) concluded that social influence positively impacts a person's online purchase intention. In the context of the present study, it can also be proposed that:

H6. Social influence positively impacts online purchase intention.

3.2. Results and data analysis

3.2.1. Descriptive analysis

a. Characteristics of the research sample

The survey results of 468 customers showed that 283 participants were female (accounting for 60.47%). In reality, customers participating in online shopping are women in Vietnam. In terms of age, the number of people between the ages of 30 and 50 participating in the survey was the most (50.21%), followed by those aged 18 to 30 (accounting for 31.2%). These people have stable incomes and often buy things for themselves and their families. Most survey respondents are officials, civil servants, and office workers (accounting for 48.08%), followed by business people (accounting for 21.79%) (Table 2).

Regarding personal income, the income level accounts for the highest percentage

from 5 to less than 10 million (accounting for 39.32%), followed by 10 to 20 million (accounting for 38.25%). Regarding the frequency of online purchasing, most respondents have been purchasing online sometimes and occasionally; however, 11.54% have never purchased online. This is the market for online businesses to look forward to in the future (Table 2).

b. Descriptive analysis for mean

This part of the analysis was performed to check the customer's level of agreement with each variable. A mean value of less than 3 indicates low impact, less than 4 indicates moderate impact, and a value of 4 or greater than 4 indicates high impact.

Table 3 indicates that the mean range of

all variables ranges from 3.429 to 4.00 with a standard deviation from 0.58858 to 0.90185, indicating that most of the respondents in this study were answered on a scale from normal to agree. People have a good assessment of the factors affecting online purchase intention, and people's online purchase intention is also rated at a high level. This shows that online shopping is gradually becoming a current and future shopping behavior trend. However, to measure the uncertainty, the standard deviation is used. A high standard deviation indicates more variation in the data and that the values are far from the actual value. Therefore, in this study, the S.D. values are shallow, indicating that the values are close to the actual values and the respondents' responses differ.

Table 2. Respondents' information

	Indicators	Frequency	Percentage (%)
Gender	Male	185	39.53
	Female	283	60.47
Age	Under 18	4	0.85
	From 18 to 30	146	31.2
	From 30 to 50	235	50.21
	Over 50	84	17.95
Occupation	Pupil, Student	49	10.47
	Officials, civil servants, office workers	225	48.08
	Businessman	102	21.79
	Workers	76	16.24
	Others	16	3.42
Monthly Personal Income	Less than five mills.VND	58	12.39
	From 5 to less than 10 Mills.VND	184	39.32
	From 10 to less than 20 Mills.VND	179	38.25
	From 20 mills.VND	47	10.04
Frequency of online purchasing	Quite often	36	7.69
	Usually	69	14.74
	Sometimes	184	39.32
	Occasionally	125	26.71
	Never	54	11.54

Table 3. Mean Analysis

Variables	Mean	Std.Deviation	N
Perceived usefulness (PU)	3.9663	.58858	468
Perceived ease of use (PEOU)	3.9343	.62156	468
Perceived Risk (PR)	3.4290	.90185	468
Perceived Trust (PT)	3.9631	.66304	468
Experience (EP)	3.8937	.62838	468
Social influence (SI)	3.8782	.61291	468
Online Purchase Intention (OPI)	4.0000	.64968	468

3.2.2. Reliability analysis

The reliability of the data collection tool is critical for the completeness and accuracy of the analysis. Indeed, it is impossible to ignore providing evidence about the data for data analysis. Therefore, it is essential to check the reliability before further analysis. For reliable data, Cronbach's Alpha value must be equal to or greater than 0.70 (Hair et al., 2010).

Table 4 shows that Cronbach's alpha values for all variables are more significant than 0.7 and less than 0.95, which shows that all variables are reliable for the study,

instrumentation is most relevant, and the results are accurate and reliable.

3.2.3. Multiple regression analysis

Multivariate analysis examines the extent of the relationship between two or more variables. Furthermore, it shows the effect of the independent variables on the dependent variable. This test is interpreted according to the value of β ; if it is significant at a significance level less than 0.05, we will accept the hypothesis; otherwise, we will reject it. In particular, it is a statistical tool that checks how many independent variables are related to one dependent variable. However, the model summary and coefficient table are presented below.

Table 5 shows that the model's adjusted R^2 is 0.520 with $R^2 = 0.526$, showing that the linear regression explains 52 % of the variance in the data. The R-squared value is the proportion of variance in the dependent variable explained by the independent variables. Therefore, the R-squared value of 0.520 shows that independent variables (Perceived usefulness, perceived ease of use, perceived risk, perceived trust, experience, and social influence) explain the change and predict the behavior of online purchase intention. However, in the case of the current model summary results, the value of $R = .725$ indicates a moderate degree of predictability.

Table 4. Reliability Analysis

Variables	Number of variables	Cronbach's Alpha Value
Perceived usefulness (PU)	4	0.814
Perceived ease of use (PEOU)	4	0.857
Perceived Risk (PR)	4	0.928
Perceived Trust (PT)	4	0.834
Experience (EP)	4	0.782
Social influence (SI)	4	0.774
Online Purchase Intention (OPI)	3	0.843

Table 5. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.725 ^a	.526	.520	.45014	.526	85.299	6	461	.000	1.744

a. Predictors: (Constant), SI., PR, PEOU, EP., PT., PU

b. Dependent Variable: OPI

Table 6. Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta				Tolerance	VIF
1	(Constant)	-.021	.249		-.085	.932		
	PU	.332	.040	.301	8.384	.000	.800	1.250
	PEOU	.144	.036	.137	4.035	.000	.886	1.129
	PR	-.115	.024	-.160	-4.902	.000	.964	1.038
	PT	.079	.034	.080	2.339	.020	.876	1.142
	EP	.227	.035	.219	6.503	.000	.904	1.106
	SI	.346	.037	.326	9.409	.000	.854	1.171

a. Dependent Variable: OPI

The above-denormalized coefficients show that the online purchase intention changes with an independent variable (Perceived usefulness, perceived ease of use, perceived risk, perceived trust, experience, and social influence) when all variables other independence remain unchanged. β is significant if $p < 0.05$. Therefore, table 6 above shows the impact of the independent variable on the dependent variable, the β value of Perceived usefulness ($\beta = .301$; Sig. = .000), perceived ease of use ($\beta = .137$; Sig. = .000), perceived risk ($\beta = -.160$; Sig. = .000), perceived trust ($\beta = .080$; Sig. = .020), experience ($\beta = .219$; Sig. = .000), Social influence ($\beta = .326$; Sig. = .000) shows the impact of these variables on online purchase

intention. Social influence is the critical factor that has the most significant influence on online purchase intention, followed by Perceived usefulness. At the same time, the research results show that Perceived trust has a positive but insignificant effect on online purchase intention, and Perceived risk has a negative effect on online purchase intention.

3.3. Discussion

The study developed an extended TAM model by adding perceived risk, perceived trust, experience, and social influence as independent variables affecting Vietnamese people's online shopping intention. Research results show that 5 out of 6 factors proposed in the model positively impact the online

purchasing intentions of consumers in Vietnam. On the contrary, there is one factor (Perceived Risk) that has a negative impact on consumers' online purchasing intention.

First, *Social influence* has the most significant influence on consumers' purchasing intentions ($\beta = 0.326$; Sig. = 0.000). This is understandable because the survey subjects here are pretty diverse: some have bought online many times, and some have never bought, so the opinions of around people are significant for people's purchasing behavior. This explains that when many people in society (brothers, friends, and others in the community) have positive reviews about online shopping, more consumers tend to use online shopping channels. This result is similar to the research results of Yang et al. (2012), Gunawan et al. (2023) and Miranda et al. (2014) when proving that the opinions of friends and relatives positively impact consumer behavior toward online shopping. Vietnamese culture is a collective, where group opinions and desires often have a more substantial impact on someone's behavior than individual opinions and desires. Therefore, in such an environment, the influence of opinions from the community and society will significantly impact consumer behavior. Online retailers need to have a strategy to increase positive comments and reviews about their products/services, focusing on creating positive social impacts and minimizing and controlling negative comments and reviews from customers.

Next, *Perceived usefulness* has the second most significant impact on consumers' online purchase intention ($\beta = 0.301$; Sig. = 0.000). When customers realize that buying online brings them much value, what they receive is more significant than what they have to spend, or online purchases bring more value than traditional purchases, customers will tend to make online purchases. The current research results are similar to the research results of Binh et al. (2022) and Al-Hattami et al. (2023). Online

businesses need to have strategies to increase the quality of products and services so that customers feel that purchasing online brings them more value than traditional purchases, thereby promoting customers' online purchasing behavior regularly.

Third, *experience* has the third largest positive impact on consumers' online purchase intention. As stated in the literature review, when customers have a good experience with online shopping, they will tend to repeat this behavior the next time. Therefore, creating a positive customer experience the first time they purchase is essential for online businesses. This result is similar to the research results of Monsuwe' et al. (2004), and Weisberg et al. (2011).

Fourth, *perceived ease* of use positively impacts Vietnamese people's online purchase intention. This result provides empirical support for TAM and supports previous research by Yoke Cheng et al. (2022). Buying online means using technology to interact with the seller. Although the digital age has made the application of technology in business and the daily activities of businesses and consumers popular, not everyone can use technology easily. Therefore, the simpler and easier to use technology applications (specifically applications in online shopping) are, the more they will motivate customers to access and make online purchasing decisions (Venkatesh, 2000; Shekhar & Jaidev, 2020).

Perceived trust has an insignificant impact on Vietnamese people's online purchase intention. This may explain why, for many Vietnamese people, the reputation of e-commerce sites and online business brands does not affect their purchasing behavior because they believe that purchasing behavior needs to be realistic, so they rely on many factors closer to them (for example, the personal experiences of relatives) rather than trusting the reputation of e-commerce sites.

Finally, this study confirms the negative impact of *perceived risk* on online purchase intention. Furthermore, it strengthens the

literature by illustrating a more significant negative effect of perceived risk on online purchase intention (Ha et al., 2021). The findings of this study reflect the limitations of TAM mentioned by Venkatesh (2000). Consumers pay more attention to possible risks due to their greater purchasing power and higher ordering frequency, making them more sensitive to risks. People are going through the post-Covid-19 economic crisis, so they always focus on financial security. Therefore, having a negative perception of online shopping may negatively affect people's online purchase intention.

4. CONCLUSION

In general, online shopping is a common trend for consumers today. This study applied several theoretical perspectives to propose a research model on factors affecting the online purchasing behavior of Vietnamese people. The author took TAM as the original model and expanded some factors such as perceived trust, perceived risk, experience, and social influence to ensure the model can explain the online purchasing behavior of customers in Vietnam. The author has built and adjusted a research model to suit the context and research object, including seven factors with 24 observed variables affecting online shopping intention, including six independent factors (variables) are perceived usefulness, perceived ease of use, perceived trust, experiences, social influence, and perceived risk. After data was collected from the questionnaire, it was cleaned and analyzed using SPSS 20.0 software. Research results indicate that social influence on perceived usefulness, experience, and ease of use positively and significantly influences online purchase intention. In contrast, perceived trust has no influence and perceived risk negatively affects the online purchasing intention of Vietnamese people.

The research results have good reference value in solving one of the outstanding problems of the online shopping market in Vietnam. The research results also help online businesses have a more

comprehensive view of consumers' online shopping behavior, thereby building better business development policies for the potential markets.

The study only tested the factors of perceived usefulness, perceived ease of use, perceived trust, experience, social influence, and perceived risk on online purchase intention, while there are still many other factors that can affect online purchase intention, such as perceived behavioral control, convenience, price expectations, seller size and reputation, legal influence... have not been mentioned in this study. This is also an issue that future studies can develop and perfect to increase the explanatory level of the model. Research conducted for the entire Vietnamese population is too broad. Further research should be conducted for each customer group to gain a deep understanding of the psychology and purchasing behavior of each target group. There should be a comparison of the differences in the online shopping behavior of target groups according to demographic differences such as age, gender, education level, and personal income to find appropriate solutions to promote online purchasing behavior for each target group. This research only studies the online purchasing intentions of individual customers, not mentioning the intentions of organizational customers. Therefore, research on the relationship between factors affecting online purchasing intentions of organizational customers is also a direction for further development.

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